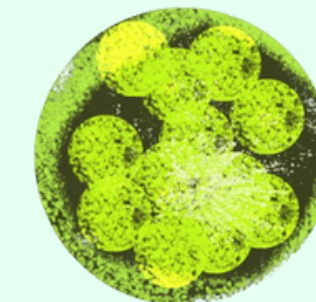


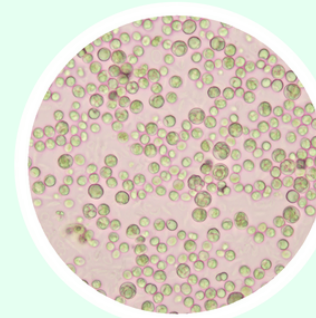


MICROALGAE INFOGRAPHICS



WHAT IT IS?

A MICROALGAE IS A TINY PHOTOSYNTHETIC ORGANISM FOUND IN WATER, CHARACTERIZED BY ITS SMALL SIZE AND ABILITY TO PRODUCE CHLOROPHYLL.



WHAT DO I NEED TO GROW?

1.LIGHT: OPTIMAL PHOTOPERIOD OF 10-12 HOURS/DAY FOR PHOTOAUTOTROPHIC GROWTH. CONTINUOUS MOVEMENT IN DEEP REACTORS ENSURES LIGHT EXPOSURE.



5.NUTRIENTS MANY ALGAL ORGANISMS ARE PHOTO-AUTOTROPHIC. ITS CULTURE MEDIUM IS BASED ON INORGANIC SUBSTANCE .
THE MEDIUM Z8 HAS HAD GOOD RESULTS IN THE CULTURE OF ALBUFERA MICROALGAE. (TABLE DOWN)



MGSO4·7H2O	0.25 G
NANO3	0.467 G
CA(NO3)2·4H2O	59 MG
NH4CL	31 MG
NA2CO3	0.02 G
FEEDTA SOLUTION	10 ML
GAFFRON MICRONUTRIENTS	1.0 ML
DEIONIZED WATER TO	1.0 L

2.TEMPERATURE: THE OPTIMAL TEMPERATURE FOR ULTIVATION IS BETWEEN 16 AND 27 °C, THE GROWTH IS FASTER BETWEEN THESE TEMPERATURES, BUT DEPENDING ON THE SPECIES OF MICROALGAE. BUT IF THE TEMPERATURE EXCEEDS 35 °C, GROWTH IS NOT POSSIBLE.



3.AIR: AIR IS AN IMPORTANT FACTOR FOR HOMOGENIZING NUTRIENTS AND PREVENTING THE PRECIPITATION OF MICROALGAE.



4.PH: ONE OF THE MOST IMPORTANT FACTORS TO CONTROL WHEN CULTIVATING MICROALGAE IS PH. THE OPTIMAL PH IS GENERALLY BETWEEN 7 AND 9 AND VARIES DEPENDING ON THE SPECIES.

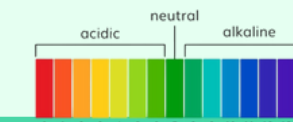


WHAT PARAMETERS SHOULD WE TAKE INTO ACCOUNT TO FOLLOW MY GROWTH?

-ABSORBANCE: ABSORBANCE IS A MEASURE OF THE RADIATION THAT A SUBSTANCE ABSORBS WHEN ELECTROMAGNETIC WAVES AFFECT IT, GENERALLY IN THE VISIBLE REGION OF A CERTAIN WAVELENGTH (400-700NM)



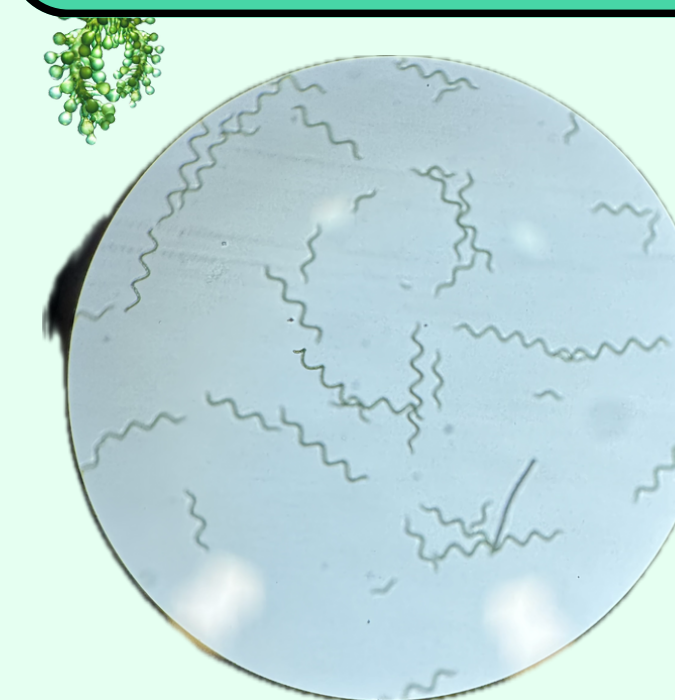
-PH: INDEX THAT EXPRESSES THE DEGREE OF ACIDITY OR ALKALINITY OF A SOLUTION.(1-14)



-COLOR: COLOR IS A FORM OF RADIANT ENERGY THAT DEVELOPS IN WAVES WHOSE SPEED DEPENDS ON THE DENSITY OF THE MEDIUM THEY PASS THROUGH.



SPIRULINA SEEN IN MICROSCOPE



WHAT RESULT HAVE WE OBTAINED?



DATA	INITIAL PH	INITIAL A (λ=650NM)	PICTURE	DILUTION WITH THE CULTURE MEDIA	FINAL PH	FINAL A (λ=650NM)	PICTURE
13-2-24	10,27	2,5		1/4	10,05	0,894	
20-2-24	10,45	2,5		1/10	8,89	1,282	
27-2-24	10,17	2,5		1/5	8,46	1,281	
5-3-24	9,95	2,338		1/6	9,99	0,700	

WHAT CONCLUSION DO WE DRAW?



WE OBSERVE ACCORDING TO OUR RESULTS THAT RESPECTING THE PREVIOUS PARAMETERS ALLOWS US A CONTINUOUS AND CORRECT GROWTH OF THE MICROALGAE IN THE SELECTED CULTURE MEDIUM, MAKING US INCREASE THE DILUTION OF SUCH CULTURE WEEKLY.

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